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ABSTRACT

The purpose of this report is to describe the educational history, status, and standardized test performance of the least successful members of the kindergarten class of 1978-79. All 253 students who were in kindergarten for the first time in 1978-79, who had not reached grade 4 by 1982-83, and who were still in the system were included in the study. Variables available for study were sex; year and month of birth; early identification (EID) ratings for language and mathematics combined for 1978-79 and separate ratings for reading and mathematics for the school years 1979-80, 1980-81, 1981-82, and 1982-83; indicators of each student's educational status in the fall of 1982 and 1983; Otis IQ and standard scores; and standard scores for the reading comprehension subtest of the California Test of Basic Skills, mathematics computation (London Math), mathematics problem solving (London), and an average of these three scores. (EID ratings are made by classroom teachers and school teams separately for language/reading and mathematics and consist of a scale that ranks a student's preparedness for the work of the next school year). Results of the follow-up study of the students, who reached grade 4 after an additional year of instruction, indicated that they did quite poorly on tests of academic ability and achievement. They tended to be disproportionately boys and to have been born in the latter half of the year. Their post-kindergarten early identification ratings were uniformly unfavorable. All of these trends are increasingly evident as the students' kindergarten EID ratings increase from one to three. A very substantial number of these students (44 percent) had EID ratings of 1 in kindergarten, and this constitutes a high false negative rate. (RH)

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EARLY IDENTIFICATION SYSTEM: FOLLOWUP OF THOSE STUDENTS IN THE KINDERGARTEN CLASS OF 1978-79 WHO DID NOT REACH GRADE 4 IN 1982-83

R. G. Stennett, Ph.D. & L. M. Earl

Research Report 84-07

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EARLY IDENTIFICATION SYSTEM: FOLLOWUP OF THOSE STUDENTS IN THE KINDERGARTEN CLASS OF 1978-79 WHO DID NOT REACH GRADE 4 IN 1982-83

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In a previous paper (Stennett, & Earl, 1984) the four-year educational history of the Kindergarten class of 1978-79 was described in some detail and their 'status' as of the fall of 1982 documented. The main purpose of that study was to describe the relationships between the Kindergarten Early Identification Ratings (EID) received by those students and their subsequent educational progress, including their performance on standardized tests of intelligence and achievement administered system-wide in grade 4 during the fall term.

Since about 10 percent of the Kindergarten class of 78-79 did not reach grade 4 in the 'normal' number of years, no measures of ability or achievement were available for them at the time the above report was written. The purpose of this report is to describe the educational history, status and standardized test performance of this group. Since this group of students was the least successful of all members of the Kindergarten class of 1978-79, it represents a key group in terms of which the predictive validity of the EID ratings can be assessed.

METHOD

Sample

All 253 students who were in Kindergarten for the first time in 1978-79, had not reached grade 4 by 1982-83, and were still in the system were included in this study.

Followup Procedures and Availability of Data

The following procedures were used to locate as many of the target students as possible:

(1) From the original file for the Kindergarten class of 1978-79 a list was created of all those students who were still in the system during the fall term of 1982 but who had not yet reached grade 4.

(2) A file of all grade 4 students to whom CTBS, London mathematics achievement and OTIS tests were administered in the fall of 1983 was checked to locate and obtain test data for all target students who took these tests.

(3) A file of all students enrolled in 1983-84 in special education classes was checked to identify any target students who were not identified by step 2 above.

(4) A file of all students enrolled in grade 3 in 1983-84 who were given EID ratings was checked to identify target students not located by the prior two steps.

(5) Finally, using the remaining target students' last known school location, telephone calls were made to the schools to discover the students' current location and status.

Variables Available for Study

The following variables were available for study: sex, year and month of birth; early identification ratings[1] for language and mathematics combined for 1978-79 and separate ratings for reading and mathematics for the school years 1979-80, 1980-81, 1981-82 and 1982-83[2]; an indicator of each student's educational 'status' in the fall of 1982 and 1983; OTIS IQ and standard scores, and standard score for CTBS Reading Comprehension, Mathematics Computation (London Math), Mathematics Problem Solving (London) and an average of these three scores.

Data Analyses

All data analyses were conducted by computer using standard statistical programs (SPSSX). The basic analyses consisted of compiling frequency distributions for all variables for the entire group of students and separate sets of distributions for students grouped by the EID ratings they received in Kindergarten.

Results

Tables 1 and 2 give the educational status of the students, as of September 1982 and September 1983 respectively, by the school team EID rating given in Kindergarten. Although the majority of the students (68%) have reached grade 4 by September of 1983 (Table 2), a significant number (28%) are still in a special education class. The remainder have left the system (4%) or are repeating a second grade (<1%). The more positive a student's Kindergarten EID rating, the more likely he is to have reached grade 4. Conversely, the more negative his EID rating, the more likely he is to be enrolled in a special education class.

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[1]EID ratings, made by classroom teachers and school teams separately for language/reading and mathematics, consist of a simple scale, as follows:

0=insufficient contact with students to make a judgement.
1=student will be ready, by the end of the school year, for the work of the next school year.
2=student *may not be ready*, by the end of the school year, for the work of the next school year.
3=it is *quite certain* that the student *will not be ready*, by the end of the school year, for the work of the next school year.

[2]Because some students were in special classes during some of these years, EID ratings are not available for all students for all years.

It is noteworthy that 44% of this group of students, who have had the least successful academic progress of the entire Kindergarten class of 1978-79, were given an EID rating of 1 in Kindergarten. This false negative rate is more than double that based on grade 1 EID ratings for the comparable group of students from the grade 1 class of 1978-79 (Stennett & Earl, 1983). This difference in false negative rates is due in part to the expected decrease in predictive accuracy as the time between EID ratings and outcome measures increases. It also confirms a trend, identified in earlier studies, for Kindergarten teachers to overestimate student achievement more often than other primary teachers.

Table 3 gives a description of the target group of students in terms of a number of educational history and standardized test variables, by Kindergarten EID rating. For reference purposes comparable figures for the *entire* Kindergarten class of 1978-79, including the target students, are also presented. The reader should note that the figures in various sections of Table 3 are unavoidably based on differing numbers of cases. The first two sections include all cases. The third section includes only students who reached grade 4 and took the standardized tests....about 120 students in all. The following trends are evident:

(1) Students in the target group are more likely to be boys and more likely to be born in the last half of the year. Both of these trends are increasingly evident as Kindergarten EID ratings become increasingly unfavourable.

(2) Students in the target group are three or four times more likely to obtain EID ratings of 2 or 3 in their post-Kindergarten years and this trend is generally more evident for students with increasingly unfavourable Kindergarten ratings.

(3) Students in the target group, even with an additional year of instruction, perform much more poorly on standardized tests of achievement and ability. This trend increases with increasingly unfavourable Kindergarten EID ratings and is especially marked for students with Kindergarten EID ratings of 3.

Summary

A followup study was conducted on those 253 students of the Kindergarten class of 1978-79 who did not reach grade four in the 'normal' number of years. About two thirds repeated a grade and the remainder were in special classes.

Those students who reached grade 4, after an additional year of instruction, did quite poorly on tests of academic ability and achievement. They tended to be disproportionately boys and to have been born in the latter half of the year. Their post-Kindergarten early identification (EID) ratings were uniformly unfavourable. All of these trends are increasingly evident as the students' Kindergarten EID ratings increase from 1 to 3.

A very substantial number of these students (44%) had EID ratings of 1 in Kindergarten and this constitutes a high false negative rate.

TABLE 1 Educational Status of Students, As of September 1982, by School Team Early Identification Rating (EID) in Kindergarten.

Status As Of September, 1982	School Team EID Rating in Kindergarten						Totals	
	1		2		3			
	N	%	N	%	N	%	N	%
Repeating a Grade	90	80	67	69	18	41	175	69
In Special Education class	22	20	30	31	26	59	78	31
Left the system	0	0	0	0	0	0	0	0
Totals	112	100	97	100	44	100	253	100
Percent by team rating	44		38		17		99	

TABLE 2 Educational Status of Students, As of September 1983, by School Team Early Identification Rating (EID) in Kindergarten

Status As of September 1983	School Team EID Rating in Kindergarten						Totals	
	1		2		3			
	N	%	N	%	N	%	N	%
In Grade 4	92	82	63	65	16	36	171	68
In Special Education class	16	14	30	31	25	57	71	28
Repeating a Grade	0	0	1	1	0	0	1	0
Left the System	4	4	3	3	3	7	10	4
Totals	112	100	97	100	44	100	253	100
Percent by Team Rating	44		38		17			

TABLE 3 Educational History and Standardized Test Performance for the Target Students, by Kindergarten Early Identification Rating (EID) and for the Entire Kindergarten Class of 1978-79.

	Variables	1978-79 Students not Reaching Grade 4 by September, 1983			All 78-79 Kindergarten Students
		Team EID Rating: Kdgn.			
		1	2	3	
1	Number of cases	112	97	44	2567
	Percent of cases	44	38	17	100
2	Percent male	62	63	7[illegible]	50
	Percent born July to December	55	62	66	50
3	% Second Year Reading Rating of 2 or 3	75	88	85	26
	% Second Year Math Rating of 2 or 3	65	81	80	20
	% Third Year Reading Rating of 2 or 3	68	64	66	22
	% Third Year Math Rating of 2 or 3	55	57	55	16
	% Fourth Year Reading Rating of 2 or 3	58	58	88	22
	% Fourth Year Math Rating of 2 or 3	44	39	65	18
	% Fifth Year Reading Rating of 2 or 3	46	59	61	-
	% Fifth Year Math Rating of 2 or 3	32	42	56	-
4	% Reading Comp. S.S. ≤ 50	36	47	71	21
	% London Math S.S. ≤ 50	27	37	67	16
	% London Math Problem Solving S.S. ≤ 50	37	42	44	21
	% Average S.S. ≤ 50	27	40	56	16
5	Mean OTIS IQ	86	85	84	102
	% OTIS IQ S.S. ≤ 50	35	44	78	16

References

Stennett, R.G. & Earl, L.M. Early Identification System: Four-year Followup of the Kindergarten class of 1978-79. Board of Education, London, Ontario, 1984 (mimeo) Research Report 84-01

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